BAREILLY INTERNATIONAL UNIVERSITY,BAREILLY

"Effectiveness of First Aid Management training programme among school children"

By

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DECLARATION BY THE CANDIDATE

I hereby declare that this thesis protocol entitled **"*Effectiveness of First Aid Management training programme among school children*"** will be a bonafide and genuine research workcarried out by me under the supervision of **Dr.Prema P**forpartial fulfilmentof the regulations for the Award of the degree of **Doctor of Philosophy** in **Nursing.**

Date: **Signature of the Candidate**

(MehevKhanam)

Certificate by the Supervision/Co-Supervision

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This is to certify that the facilities for the research work entitled **"*Effectiveness of First Aid Management training programme among school children*"** allotted to Ms. MehevKhanam under my direct supervision and guidance do exist in the department of Nursing Faculty of Nursing, Bareilly.

I will ensure the authenticity of the thesis protocol topic and research methodology which conforms to the standards of Bareilly International University.

Supervisor

Signature

Name with Degree

Faculty of Nursing

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INTRODUCTION

What is done to the children,they will do to the society

"Karl Menninger"

Accidents can happen anywhere at any time. The consequence of unintentional accident can be life threatening. Unintentional accident needs immediate and appropriate life saving care before the affected person get major treatment[1]. This life saving care or first aid is an assessment and interventions that can be carried out by a person nearby immediately with minimal or without medical equipment[2]. Therefore, this makes it important to have basic knowledge of first aid. The ultimate goal of first aid is to stop or to reverse the possible harm at a given time before reaching the appropriate health care center[3]. First aid knowledge is methods and techniques that used perform practices related to prevention and immediate response to health emergencies. It can be given in all areas such as household, schools, workplace, and recreational areas. Beyond health matters, first aid knowledge also increases the social responsibility of the society and strengthens values[4].

A basic knowledge and understanding of first aid can be invaluable for individuals to be able to provide emergency care in the event of an accident, possibly saving lives and minimizing injury. First aid is the providing of first and early care for an illness or injury, by a non-expert but trained person, till medical treatment can be accessed. Immediate first aid when provided to patients who require emergency care makes a huge difference to the outcome.[5]

In certain self-limiting medical conditions, correct first aid measures are sufficient to avoid a medical consultation.[6]

Building skills in first aid with the vulnerable people can help to build safer and healthier communities. Glendon et al suggested that the teaching of first aid to students is probably cost-effective in terms of saving lives.[7]They also recommended that first aid should be taught within schools. Engeland, Roysamb, Smedslund and Sogarrd studied the implementation of training of first aid to junior high students. The researchers measured the implementation of the program by teachers and the attitudes and knowledge of their students.[8]They discovered that students whose teachers implemented the program enthusiastically had better attitudes toward first aid implementation and were more knowledgeable in first aid.

"Today's Children are tomorrow's citizen'. Imparting scientific knowledge to the children is inevitable to build up a healthy society. Preventive aspect of child care is an important part of health promotion and to protect the child from various emergencies. Enlightening the children regarding various aspects of primary aid to mitigate the serious repercussions of accidents. Increased focus on safety strategies in emergency and public awareness has direct impact on reducing the mortality rates and improving the general health of the population.

Adolescents as a group is the most adventurous group, characterized by increased proximity to various types of accidents and emergencies as they try to explore the environment. All primary school children should receive first aid training starting in first grade. It is the need of the hour to facilitate the children with scientific knowledge [9].

They are more prone to variety of injuries. Motor vehicle accidents are the leading cause of death in the adolescent's years. Pubescent are especially susceptible to injury when

riding snowmobiles, or motorcycles, a sport that is increasing in popularity. Pillion riders may burn their legs on the exhaust pipe. Other causes are drowning and firearms, so first aid is more needed in youngsters[10]. Estimating the burden of injuries is crucial for understanding the magnitude of the problem, developing mechanisms for intervention, allocating physical, human, financial resources for control of the problem throws light to the need of emergency aid. A review of Indian studies and observations by other agencies indicate the ratio of deaths to serious injuries needing hospitalization to minor injuries as 1:20:50. In Bangalore and Haryana this ratio was 1:18:50 and 1:29:70, respectively. The death rate rises rapidly following puberty because of the large number of deadly accidents, homicides, and suicides in the 15-24 year age group. These three causes of death in teens should all be preventable by rendering immediate aid to the casualties in order to reduce threatening complications[11].
The goal of first aid is to save life, prevent an injury or illness from worsening or to help speedy recovery. First aid and basic life support are so important that teaching basic first aid should be compulsory in all schools. As in the school campus majority of pupil including teaching faculty are available during school timing and children while playing or any other circumstances are prone to have minor accident. So it is important for school teacher to know first aid and how to utilize it in proper manner. Without any delay as a first aid save persons life so it is always better as it is said that "Preparedness is a key element of first aid"[12]

Accidents happened daily, knowledge of first aid, which constitute life saving treatment for accident or unexpected illness. So every individual at every age should always have common knowledge of accident. "First aid" is like first responder. First aid is initial cares that given to victim arise at a health care centre. Before medically trained personnel arrived. Or before the victim arrives at a health care center. It is estimated that 50% of death occurs within the 1st hour of accident, 30% between 1 hr. and a week. And 20% occur after 1st week. The "golden hour" and platinum hour highlight the importance early trauma care Important factor responsible for increasing secondary injuries and complication are non available of first aid. Delay in transfer from injury side to a hospital, lack of definitive treatment in first aid contact. Hospitals, absence of triage and external medico legal problem.[13]

NEED OF STUDY

It is very difficult for a man to go out somewhere and return safely because we cannot give any guarantee or security to our life. This is the world of accidental world. So many accidents occur in many places like in schools, during travelling, when doing our daily activities and place is left out. People motive is just to get away from the place when accident occurs. They do not come forward to help or to have some first aid care because they are not aware of giving first aid for injuries. We could see the same situations in the school also. A lot of care must be taken while the students are in the schools playground or in public places. So they must have awareness on first aid and that has to be given for the school teachers.[14] Because, first aid training not only provide with knowledge and skills to give life but also help to develop safety awareness and habits that promote safety at home, at work, during recreation and on the streets and highways. Every time a health worker would not be available in the school: where the accidents can take place at any point of time. It is needed or desired that the staff of the school should have knowledge so that they can responsible to look after the minor

ailments or accidents in the school. Student's safety is a major concern for the parents and the school staff[15s].

In healthcare, we know that properly administered first aid could save a person's life, which makes the importance of learning first aid and to choose the correct and authorized first aid training. The main aim to give first aid is to save life, to prevent deterioration of the condition and further injury, to prevent conditions that might increase the original injury, to make the victims as comfortable as possible, to arrange for transportation to the hospital. To preserve the valuable life of victim's undergone emergency situations, the blossoms of future should have proper awareness regarding the first aid management [16]. Despite their lack of knowledge, a vast majority (94%) of children agreed that it was very important for them to learn first aid - and most wanted to learn more[17]. You're never too young to learn lifesaving first aid skills [18]. Teens should have information about basic first aid since emergencies can happen at any time to anyone.First aid measures can be life-saving. Starting first aid education early may strengthen interest, motivation and ability to provide first aid.

REVIEW OF LITERATURE

Review of literature has been grouped for the preparation of synopsis under the following headings.

- Review of literature related to knowledge of first aid in school children.
- Review of literature related to common accidents and practices in school children.
- Review of literature related to effectiveness of educational intervention on first aid.

Review of literature related to knowledge of first aid in school children.

Ab Rahman 2005 Malaysia did a survey among university students regarding the awareness and knowledge of epilepsy students were required to answer a series of questions on awareness and knowledge of epilepsy. It was found that 86.5% of students had heard or read about epilepsy, while 55.6% had observed and epileptic seizure. Only 30.7% said that they knew the cause of epilepsy an5.3% thought epilepsy was caused by evil spirits. Epilepsy was considered hereditary by 66.9% of respondents, while 4.9% thought it was contagious. The finding indicate a generally favorable level of awareness and knowledge of epilepsy still need to improve along with understanding of epilepsy.

Baffer M et al., 2007 Turkey assessed the knowledge of first aid, among school children. The goal of this study was to determine the knowledge by using a questionnaire. Study findings were 65.1% have incorrect answers regarding epistaxis, 63.5% for bee stings, and 88.5% for abrasion. The result of this study showed that children are having in adequate knowledge. The study concluded that basic first aid should be compulsory in all school.

Thein MM etal., 2005 Singapore did a cross sectional worldwide study in knowledge attitude and practices of childhood injuries and their prevention among primary care givers. The samples are collected with a two stage stratified random sampling. This study revealed that care givers are having adequate knowledge in road safety but poor knowledge in home safety and first aid practices. He conclude the study with needed frequent educational programme.

Singer AJ et al., 2005 Switzerland did a descriptive study in pediatric first aid among parents to determine the knowledge of first aid practices in parents. It includes management of stings ,burns, scalds, nosebleed, seizures, eye injuries, fracture, sprain, fever skin wounds and etc. Knowledge of specific guidelines ranged from 21-90%.Subjects especially lacked knowledge regarding the rapid removal of all singers. Only 36% have sting awareness and 46% burn awareness. Knowledge is unaffected by age, gender and education. Further education is needed to improve the knowledge of first aid practices.

Review of literature related to common accidents and practices in school children

.**Biagi R. Cardarelli F., 2010 Italy** conducted a study to evaluate the awareness of sports a risk factor of dental injuries, the emergency management when a tooth avulsion occurs and the compliance about mouth guards .Two hundred children and youngsters 8 to 15 year old9 (147 boys and 53 girls) attending sports societies in Isernia , a town in southern Italy , participate to the investigation. The sports involved were soccer ,martial arts , tennis , swimming , volleyball ,basketball ,and cycling. Sixty-five percent of the athletes were aware of the possibility of oral injuries during sports practice and 8.5% referred an experience of dental trauma . Finally , 80.5% of the athletes knew about mouth guards as protective devices ,but only 5% actually used them., eight out of ten were provided by the dentist. This study demonstrated needed to inform coaches ,teachers, athletes and parents about dental injuries and to promote the mouthguards use , especially in contact sports practice.

Brain o Neil et al ., 2000 Australia conducted a study at Gosford hospital, Australia to identify the adequacy of first aid care following minor burns in school children. The outcome is measured with comparisons of the adequacy of first aid delivered by parents , care givers ,general practioners , local hospitals and community health worker. Burns included scalds, contact , flame , chemical or electrical burns. The study result shows that there is a need to educate parents, health professionals and children regarding appropriate first aid for burns.

Currie BJ , Canale E, Isbister GK ., 2008 Australia in the prospective royal Darwin hospital snakebite study , pressure-immobilization first aid (PI) was used more often the in previous studies. However , bandages were not uncommonly too loose or not applied to the whole limb and immobilization was often neglected. While PI should continue to be promoted as the standard for Australia for the present,prospective multicentre studies of snakebite with quantitative assays for PI and define the limitations of timing of application and determine the optimum types of bandages materials to use and the pressure required to be maintained.

O Hara KA 2007 Indonasia did a study in first aid for seizures to protect the individual from harm during seizure. The study reveals that the lack of knowledge in case of parents , teachers , co workers and public at large tend to increases the potential of seizure which are likely to prolong or reoccur . And the associated discomfort about how to provide first aid also can contribute to the general stigma associated with epilepsy. The main goal of this study is to the prevention of status epileptics.

Review of literature related to effectiveness of educational intervention on first aid

Dr. Owen Lewis 2004 Nepal in his prospective s multiple group study in evaluation of first aid for snakebite around 20 communities and came to know the effectiveness of video teaching regarding first aid for snake bite in Sunsari District at Nepal . The knowledge after teaching

increased (0.9) than not seen video (0.2). This study reveals that no significant difference among illiterates and non illiterates.

Lamb R and Joshi MS 2004 UK conducted a quasi experimental study on assessment of safety skills performance and knowledge to evaluate the education offered by the life skills , learning for living , village , Bristol ,UK. He used two quasi experimental matched control group. Study-1 knowledge and performance three months post evaluation . Study 2-knowledge pre intervention at a three points , to distinguish between immediate learning and longer term retention . Study 1- Lifeskill/intervention children did better than control children. Study 2. intervention children did better thancontrol children immediately after the intervention and three months later in all knowledge tests . The life skill package improved both knowledge and performance.

Mello MJ et al ., 2007 Island conducted a study in injury prevention centre at Island. The aim of the study was to find out the effectiveness of education on injury prevention as a means of disseminating knowledge among children. The end of the education handout is provided regarding injury prevention . The study results revealed the need for continued reseaech education as a role in injury prevention.

Pinakibayans 2000 Karnataka did a study to assess the effectiveness of booklet among mothers of under five children on prevention and management of injuries in selected areas of Udupi , Karnataka . The study findings reveal that mother have poor knowledge in pretest and gained adequate knowledge in posttest, She concluded that the health professional and researchers need to impart the knowledge through various educational programme.

Amarjit singh.**,2002 Gujarat** who have done a study on dog bites and its management in the context of prevention of rabies in a rural community of Gujarat assessed the level of general awareness and knowledge and also the results revealed that 31.1% would like to apply first aid measures,36.4% follow some religious practices and the remaining alone will consult a doctor .Only 86.6% of individuals are aware of anti rabies vaccine.

Riyadh K. Lafta et al,(2013) Baghdad Conducted a cross-sectional study to assess mothers knowledge of domestic accident prevention involving children. The study recommended that there is a need for well planne[illegible]ucational programme about causes of domestic accidents. The results revealed th[illegible] 90% had poor knowledge in preventing electrical

accidents. Only 10.2% of the mother were found to have a good level of knowledge and 9.2 % of the mothers had good level of knowledge in prevention of injuries from chemicals and detergents. Higher educated mothers were statistically associated with a lower level of knowledge in accident prevention. Mothers with more children and those whose children had previously been involved in an accidents were found to have a better level of knowledge.

Suguna T. C. et al,(2015) Tamilnadu Conducted study on women's awareness about domestic accidents among toddlers, Sree mookambika college of nursing, kulasekharam , kanyakumari district. Sample size was 300 data on nature and types of domestic accidents showed that 54.7% had adequate knowledge, 25.3% had average knowledge, 20% of the population had inadequate knowledge. Data on first aid of domestic accidents show that, 48.7% had average knowledge, 31.6% had adequate knowledge and 19.7% of the population had inadequate knowledge. Data on prevention on domestic accidents show that 43.3% had average knowledge,41% population had adequate knowledge,15.7% of the population had in adequate knowledge regarding preventive measure of domestic accidents. Knowledge on domestic accidents seems to have significant association with age of the women, religion of the women, and family's monthly income of the women.

Langly J and Silva P 1986 Pediatric is special, sensitive and most important branch of medicine. Giving first aid in pediatric emergencies require more skills. Usually mother is the first person who can give first aid. Assessment of mother's knowledge using a questionnaire comprising 13 multiple choice question was done. The result showed that approximately three quarters of mothers correctly answered 70% of the questions. Whilst higher intelligence and previous training in first aid were shown to be associated with batter score. The effects were small. Some aspect of first aid which deserve more emphasis in training course were identified.

AIMS

- ✓ To assess the effectiveness training programme regarding First Aid Management.

OBJECTIVES

- ❖ To assess the pre-test knowledge, attitude and practice regarding First Aid Management among school children for experimental group and control group
- ❖ To assess the effectiveness of training programme regarding First Aid Management on knowledge attitude and practice among school children for experimental group and control group.
- ❖ To associate the pre-test knowledge score with demographic variables for experimental group**.**

MATERIAL AND METHOD

Research approach and design

It will be conducting as a quasi-experimental study(nonequivalent control group pre test -post-test only design) in selected schools of Bareilly. Institutional ethical clearance will be sought before commencing the study. Written informed consent will be taken from all the children and their parents, including in the study.

Study Duration

The period of the study will be 12 months (april 2019 to 31 march 2020, which will be used for the development of the tool, collection of data, evaluation and presentation of findings.

Sample Size & Sample Technique

Sample size 280 will be taken by using complete enumeration method.
For present study the purposive sampling will be used.

Study Population

The population will be school children of 7^{th} class who will full fill the inclusion criteria will be enroll for the study.

Inclusion criteria
1.School children willing to give inform consent
2. School children who are available at the time of data.

Exclusion criteria
1.School children who are less or more than 10 to 12 years of age.
2. School children who are absent during data collection.

DATA COLLECTION TECHNIQUE AND TOOL

For the present study a **Customized Knowledge Questionnaire** will develop to assess the knowledge.

- ❖ The Structure Knowledge Questionnaire will consist of three sections-
- ✓ Section I will comprise of questions related to demographic data, such as age, gender, educational status of the mother, educational status of the father ,father's occupation ,mother's occupation, ,type of family, , number of siblings.
- ✓ Section II will comprise of questions related to school accidents.
- ✓ Section III will comprise questions related to first aid management.

Check list and **Attitude scale will** be develop to assess the practice and attitude respectively.

DESCRIPTION OF INTERVENTION (TRAINING PROGRAM) REGARDING FIRST AID MANAGEMENT.

Lecture cum demonstration method will adopt for giving the training, based on International Federation of Red Cross Societies "First Aid and Children" Resource Guide 2016 and ACEP-First-Aid-Manual. It included the following content areas:

- Introduction to first aid
- First aid management (wound,fainting,poisoning,burn,drowning,suffocation,fracture)

For content validity Expert opinion will be taken and pilot study will be done for reliability which is checked by karl Pearson's coefficient of correlation

Procedure for final data Collection

- Formal administrative approval from the Principal, of selected schools of Bareilly will be taken to conduct the final study.
- On day pretest will be taken for one hour after that First aid Training will be administered for two hour. On tenth day the post test knowledge will be taken by structured knowledge questionnaire in order to evaluate the effectiveness of training program. The time taken for post-test will be one hour.

DATA ANALYSIS

- The data will be organized, tabulated and analysed using following descriptive and inferential statistics:
- Frequency and percentage will be computed to describe the sample characteristics of the subjects
- Maximum score, range of obtained scores, mean median, mean difference, standard deviation.
- t-test used to evaluate the effectiveness for pre test and post-test knowledge scores .
- chi-square computation to determine the association between pre-test knowledge scores and demographic variable.

ETHICAL CONSIDERATION

Permission to conduct the study will be taken from competent authorities.

- The research committee of Bareilly international university.
- Formal administrative approval from the Principal, of selected schools of Bareilly
- The informed consent form for school children in the study
- The informed consent form for parents of school children.

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